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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,071	05/04/2001	Herman P. Benecke	22094(1)CIP	8151
24116	7590	10/09/2003		EXAMINER
BATTELLE MEMORIAL INSTITUTE 505 KING AVENUE COLUMBUS, OH 43201-2693			SZEKELY, PETER A	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/849,071	BENECKE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Peter Szekely	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 September 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17 and 19-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 23-30 is/are allowed.
- 6) Claim(s) 1,4-17 and 19-22 is/are rejected.
- 7) Claim(s) 2 and 3 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>9/22</u> . | 6) <input type="checkbox"/> Other: _____                                     |

**DETAILED ACTION**

***Specification***

1. The disclosure is objected to because of the following: On page 4, lines 25-27, oleic, linoleic, linolenic and palmitoleic acids are mentioned as being of vegetable origin. On page 6, lines 28-29 palmitoyl, stearoyl, arachidoyl, behenoyl, mystyroyl and margroyl acyl groups are mentioned as being of vegetable origin. The Examples say the same thing. This is incorrect All materials mentioned in this paragraph are of animal origin.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6-17 and 19-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants cannot claim non-epoxidized esters in the dependent claims when the independent claim restricts the invention to epoxidized esters. Disoyate and tetrasoyate esters cannot contain non-soy acyl groups. A mixture cannot contain only one ingredient (claim 9). Furthermore the epoxidized and non-epoxidized ingredients,

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which could be "R"-s, if all valences had not been already occupied by soy, are not of vegetable origin. Claim 1 excludes non-epoxidized and/or not vegetable derived fatty acid products.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 4-6 and 8-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. In claim 1, the phrase "a fatty acids", (line 18), is grammatically incorrect. In claim 4, penultimate line, the phrase "and mixtures of derivatives thereof" is indefinite. Carbon dioxide is a derivative of vegetable oils. It is derived by burning. In claims 5, 6 and 9, the phrase "said plasticizer composition" has no antecedent basis in claim 1. "Said plasticizer" is enough. In claims 8 and 10-12 the "said composition" should be replaced by "said plasticizer".

#### ***Claim Rejections - 35 USC § 102***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 15-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Budde 3,050,480, Sidi 3,218,296, Graver 3,236,795, Hastings 3,493,414 or Wilk et al. 4,373,940.

9. Budde discloses soybean oil esterified with ethylene glycol or pentaerythritol in column 3, lines 3-20. See also column 2, lines 65-69. Sidi teaches the pentaerythritol

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tetraester of epoxidized soybean oil and linseed oil fatty acids in column 2, lines 1-3. Graver recites the epoxidized ester of linseed oil fatty acids and pentaerythritol in column 5, lines 74-75. Hastings displays the epoxidized di-, tri-, or full esters of mono-, di- or poly-pentaerythritol with soy or linseed fatty acids in column 6, lines 45-48. Wilk et al. reveal the reaction product of epoxidized soy oil with ethylene glycol in column 5, lines 26-28. Applicants' claims are not novel. In the alternative, since propylene glycol is a homologue of ethylene glycol, propylene glycol disoyate would have been obvious to one having ordinary skill in the art, over ethylene glycol disoyate, at the time the invention was made.

***Allowable Subject Matter***

10. Claims 23-30 are allowed.
11. Claims 2 and 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (703) 308-2460. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Peter Szekely  
Primary Examiner  
Art Unit 1714

P.S.  
10/2/03